Complete Summary

GUIDELINE TITLE

Patient safety in office-based surgery facilities: I. Procedures in the office-based surgery setting.

BIBLIOGRAPHIC SOURCE(S)

Iverson RE. Patient safety in office-based surgery facilities: I. Procedures in the office-based surgery setting. Plast Reconstr Surg 2002 Oct;110(5):1337-42. [14 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Any condition which may be treated by office based plastic surgery

GUIDELINE CATEGORY

Management

CLINICAL SPECIALTY

Anesthesiology
Plastic Surgery
Surgery

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide guidelines on office-based surgical procedures

TARGET POPULATION

Any patient undergoing office-based plastic surgery

INTERVENTIONS AND PRACTICES CONSIDERED

Patient Management

1. Hypothermia prevention measures (e.g., use of cutaneous warming devices such as Bair Huggers, forced air warming blankets, and intravenous fluids warmers)
2. Managing intraoperative blood loss (ensuring availability of blood and blood components)
3. Avoidance of liposuction in combination with multiple procedures
4. Limitations on duration of procedures
5. Thromboprophylaxis measures
    - Risk rating for thrombosis or embolism based on detailed patient history and physical examination
    - Thromboprophylaxis measures for risk rating
        - Patient positioning to avoid constriction and pressure
        - Pneumatic compression of calf/ankles
        - Alteration of operating table
        - Hematology consultation
        - Antithrombotic pharmacotherapy
6. Postoperative recovery measures
    - Pain management
    - Nausea/vomiting management
    - Dizziness management

MAJOR OUTCOMES CONSIDERED

- Morbidity and mortality associated with surgery and anesthesia
- Hospitalization rate

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

At the American Society of Plastic Surgery (ASPS) Annual Meeting in October of 2000, the ASPS Board of Directors convened the Task Force on Patient Safety in Office-based Surgery Facilities. The task force was assembled in the wake of several highly publicized patient deaths, increasing state legislative/regulatory activity, and a moratorium on all level II and level III office-based surgery in the State of Florida. The task force faced a daunting task.

The first area the task force focused on was collecting, evaluating, and reporting the health policies, accreditation standards, state legislation/regulation activities, and publications that influence the delivery of health care in office-based surgery facilities. With the information gathered, the task force produced several documents, starting with an accreditation crosswalk table that contrasted the office-based surgery standards of the three nationally recognized accrediting agencies. The task force also built a database to track state office-based surgery regulations, which was used as a resource to draft office-based surgery model legislation/regulation. The accreditation crosswalk and model legislation/regulation were placed on-line for members and have been widely distributed to national, state, and specialty medical organizations and state medical boards.

The second area the task force tackled was the development of office-based surgery guidelines. After an extensive review of the existing guidelines and scientific literature, it was determined that few materials met the scientific rigor necessary to establish clear standards of practice. Therefore, the task force determined that it would be more appropriate to develop office-based surgery practice advisories, which are defined as systematically developed reports intended to assist decision-making in areas of patient care in which scientific evidence is insufficient. The advisory is based on the best information available and largely reflects the collective opinion of the members of the task force.

The task force included representatives from related plastic surgery organizations and the American Society of Anesthesiologists.

The majority of clinical research and scientific literature published on ambulatory surgery has been completed in the hospital-based ambulatory surgery setting. Research and published materials from the hospital-based ambulatory setting were used extensively in the development of this practice advisory; although the setting is not identical to that of the office, it is the most applicable.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The Practice Advisory for Procedures in the Office-based Surgery Setting was approved by the American Society of Plastic Surgery Board of Directors in November of 2001.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Physiological Stresses Associated with Surgical Procedures

Hypothermia

The office surgery suite must be equipped so that temperatures can be adequately monitored and adjusted; equipment should be available to warm the patient, including such cutaneous warming devices as Bair Huggers, forced air warming blankets, and intravenous fluids warmers, as necessary. Without such

hypothermia prevention measures, the procedures performed should be of short duration (1 to 2 hours) and limited to no more than 20 percent of the body surface area.

Intraoperative Blood Loss

Procedures on the average-size adult patient with 500 cubic centimeters (cc) or greater anticipated blood loss should be performed only in facilities where adequate blood and blood components are readily available.

Liposuction in Combination with Multiple Procedures

The presumed benefits of combining procedures, particularly liposuction, must be weighed against the possibility of adverse events. It is the position of American Society of Plastic Surgeons (ASPS) that liposuction can be performed safely in the office setting when done in accordance with ASPS recommendations to limit total aspirant (supernatant fat and fluid) to 5000 cc or less (ASPS Task Force on Liposuction, 2001). When large-volume liposuction is combined with certain other procedures, such as abdominoplasty, serious complications have arisen (Hughes, 2001; ASPS Task Force on Liposuction, 2001). Therefore, it is recommended that such combination procedures be avoided.

Duration of Procedure(s)

It is important to schedule long procedures sufficiently early in the day to allow for adequate recovery time before discharge (Mingus et al., 1997). If possible, the surgery should be completed by 3 PM to allow adequate time for recovery and discharge. Ideally, the overall duration of the procedure(s) should be completed within 6 hours. Although many plastic surgery procedures have proved safe in the office setting, attention to patient selection, intraoperative management, and postoperative care is of particular importance when procedures of longer duration are to be performed in the office setting (Fortier, Chung, & Su, 1997; Marshall & Chung, 1997; Chung and Mezei, 1999).

Thromboprophylaxis Measures

Risk Rating for Thrombosis or Embolism

- Low-risk: Patients who face uncomplicated surgery and have no risk factors. These patients are usually under 40 years of age, although older patients undergoing short procedures may qualify.
- Moderate-risk: Patients 40 years and older who have no additional risk factors but who face procedures longer than 30 minutes. Patients who use oral contraceptives or are on postmenopausal replacement therapy are also at moderate or greater risk.
- High-risk: Patients over 40 years of age with at least one risk factor who face procedures over 30 minutes or longer under general anesthesia and/or have other risk factors.

Thromboprophylaxis Measures for Risk Ratings

- Low-risk: Comfortable positioning on the operating table with the knees slightly flexed. Constriction of the extremities and external pressure should be avoided.
- Moderate-risk: In addition to the recommendations for low-risk patients, intermittent pneumatic compression devices of the calf or ankle and frequent alteration of the operating room table are recommended. The devices should be in place before the induction of general anesthesia, and their use should be continued until the patient is awake and moving in the recovery unit.
- High-risk: In addition to all recommendations for low-risk and moderate-risk patients, both a hematology consultation and preoperative/postoperative pharmacologic antithrombotic therapy should be considered.

As part of the patient history and physical examination, attention should be paid to factors that predispose the patient to thrombosis or embolism, including:

- Patient history, including the use of contraceptives and hormone replacement
- Family history, with attention to past episodes of thrombosis or embolism
- Genetic disposition to clotting disorders
- Edema, swelling, or other signs of venous insufficiency in the lower extremities.

On the basis of this information, patients should be categorized as low-risk, moderate risk, or high-risk, and thromboprophylaxis should be implemented accordingly.

Potential Postoperative Recovery Problems Leading To Unplanned Hospital Admissions

Control of nausea/vomiting, dizziness, and pain is essential to postoperative recovery and discharge. Pain management should be correlated to body mass index and the procedure being performed. In addition, the patient should be sent home with sufficient medication to control pain and with adequate instructions on the use of this medication.

See the original guideline document for information on provider qualifications and surgical facility standards.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

This advisory provides a synthesis and analysis of expert opinion, clinical feasibility data, open forum commentary, and consensus surveys. The advisory is based on the best information available and largely reflects the collective opinion of the members of the task force.

Research and published materials from the hospital-based ambulatory setting were used extensively in the development of this practice advisory; although the setting is not identical to that of the office, it is the most applicable.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

By implementing reasonable controls that are based on expert opinion and the best scientific information available, office-based surgery can be a safe and positive experience for both the patient and the physician.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Practice advisories are strategies for patient management developed to assist physicians in clinical decision-making. The Practice Advisory for Procedures in the Office-based Surgery Setting, based on a thorough evaluation of the current scientific literature and relevant clinical experience, describes a range of generally acceptable approaches to the diagnosis, management, or prevention of specific diseases or conditions. This practice advisory attempts to define principles of practice that should generally meet the needs of most patients in most circumstances. However, this advisory should not be construed as a rule, nor should it be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed at obtaining the appropriate results. It is anticipated that it will be necessary to approach some patients' needs in different ways. The ultimate judgment regarding the care of a particular patient must be made by the physician in light of all of the circumstances presented by the patient, the available diagnostic and treatment options, and the available resources.
- This practice advisory is not intended to define or serve as the standard of medical care. Standards of medical care are determined on the basis of all facts or circumstances involved in an individual case and are subject to change as scientific knowledge and technology advance and as practice patterns evolve. This practice advisory reflects the state of knowledge current at the time of publication. Given the inevitable changes in the state of scientific information and technology, periodic review and revision will be completed.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Iverson RE. Patient safety in office-based surgery facilities: I. Procedures in the office-based surgery setting. Plast Reconstr Surg 2002 Oct;110(5):1337-42. [14 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 Oct

GUIDELINE DEVELOPER(S)

American Society of Plastic Surgeons - Medical Specialty Society

SOURCE(S) OF FUNDING

American Society of Plastic Surgeons (ASPS)

GUIDELINE COMMITTEE

American Society of Plastic Surgeons (ASPS) Task Force on Patient Safety in Office-based Surgery Facilities

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the American Society of Plastic Surgeons Web site.

Print copies: Available from the American Society of Plastic Surgeons, 444 East Algonquin Road, Arlington Heights, IL 6005-4664

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

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